

Remarks

Claims 1-19 and 21-44, and 46-48 are pending. Claims 1, 38, and 46 are amended while claims 20 and 45 are cancelled and claim 48 is added. Applicants assert that all claims are in condition for allowance as set forth more fully below.

Objections to the specification

The first paragraph has been objected to for failing to provide the serial number of the related applications. The first paragraph has been cancelled such that the objection may be withdrawn.

Double Patenting

Claims 1-3, 6-7, 9, and 38 are provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 5-6, 8, 31-35 of co-pending application 10/726,257. Claims 1-2 provisionally rejected as being unpatentable over claims 1, 3, and 20 of co-pending application 10/869,236. Claims 1-2, 6, 25, and 38 are provisionally rejected as being unpatentable over claims 1-2, 5, 6-7, 14, and 25 of co-pending application 10/869,237.

As these are provisional double-patenting rejections, responding would be premature as said claims of the co-pending applications have yet to be patented. Applicants reserve the right to respond to the double-patenting rejections in a future reply upon said claims of the co-pending applications becoming patented.

112 Rejections

Claims 34-37 are rejected under 35 USC 112 first paragraph as not being enabled by the disclosure. Claims 34-37 are also rejected under 35 USC 112 second paragraph as being indefinite because the preamble is not being given patentable weight. Applicants respectfully traverse these rejections.

Regarding the lack of enablement, Applicants contend that the specification does provide adequate support for these claims. The structure being claimed is that of claim 1 and is not being questioned in this rejection. Therefore, it is the support for the headlight as in claim 34, dental curing as in claim 35, projection system as in claim 36, and LCD

display as in claim 37 that are being called into question. Applicants respectfully direct the Examiner to FIG. 10 and the related discussion which supports the headlight as in claim 34, to FIG. 11 and the related discussion which supports the dental curing as in claim 35, and to paragraph [0082] which supports the projection system and LCD display apparatus as in claims 36 and 37, respectively. Thus, as each of these claims is adequately supported by the specification, Applicants respectfully request that the rejections under section 112 first paragraph be withdrawn for each of these claims 34-37.

Regarding the indefinite assertion, the rejection appears to be based on the preamble lacking patentable weight. However, the preamble lacking patentable weight, whether a valid position or not, has no impact on whether the claim elements themselves are definite. As the claim elements are those of claim 1, which has is apparently definite as there is no 112 rejection of it, then the claim elements for claims 34-37 are likewise definite. Therefore, Applicants assert that claims 34-37 are definite, regardless of whether the preamble is given patentable weight, and respectfully request that the section 112 second paragraph rejections be withdrawn for each of these claims 34-37.

102 Rejections

Claims 1-2, 5, 22-23, 36, 38, 42, and 43 are rejected under 35 USC 102(b) as being anticipated by Parker (US 6,224,216). Claims 1-2, 25-28, 30, 38-41 are rejected under 102(b) as being anticipated by Hed (US 5,301,090). Claims 1-2 and 35 are rejected under 102(e) as being anticipated by Gofman (US 7,029,277). Claims 1-2 are rejected under 102(e) as being anticipated by Spooner (US Pub 2003/0233138). Claims 47-47 are rejected under 102(e) as being anticipated by Stam (US 6,587,573) Applicants traverse these rejections to the extent these rejections apply to the currently pending claims.

Claims 1-37

Amended claim 1 recites a photon emitting device, comprising...a plurality of optical waveguides, wherein each of the plurality of optical waveguides includes a first end and a second end, wherein each first end receives concentrated radiation from a corresponding concentrator, wherein a portion of the plurality of optical waveguides have shaped second ends such that light emitted from the shaped second ends is directed along a light path different from light emitted through non-shaped second ends....

None of the cited references discloses these recitations. Previously pending claim 20 recited similar recitations and was rejected under 35 USC 103(a) as being unpatentable over Hed in view of Parker. The recitations involving the shaped second ends were said to be disclosed by Parker at FIG. 9 and col. 6-col. 7. However, it must be noted that Parker does not disclose that the plurality of optical fibers includes some fibers with shaped ends. To the contrary, Parker discusses that the optical integrator may have a shaped end. The optical integrator is not among the plurality of optical fibers but is instead a large glass rod that collects light from the plurality of fibers. Thus, Parker is failing to disclose the claim recitations for several reasons, namely, that the fibers do not have shaped ends, next that light is being directed along a different path from light emitted through non-shaped ends since all the fibers direct their light into the integrator and all of the integrator's light gets directed through the shaped end such that all light is being directed along the same path. Finally, Parker relies on all of the fibers emitting their light along the same path so that it can be collected by the optical integrator. Neither Hed nor any of the other cited references accounts for this deficiency of Parker such that claim 1 is allowable for at least these reasons.

Dependent claims 2-19 and 21-37 depend from an allowable base claim and are also allowable for at least the same reasons.

Claims 38-45

Amended claim 38 now recites the subject matter of claim 45 which was deemed allowable in the Office Action. Accordingly, claim 38 is allowable for at least these reasons. Dependent claims 38-44 depend from an allowable base claim and are also allowable for at least the same reasons.

Claims 46-48

Amended claim 46 recites a vehicular headlight illumination system comprising a solid state light source located in a first vehicle compartment to generate a selected illumination pattern, the solid state light source comprising a plurality of solid state light emitters, each of the solid state light emitters being optically coupled to a plurality of corresponding optical fibers, wherein heat generated by the solid state light source is distributed to a location apart from the first compartment.

Stam fails to disclose these recitations. At no point does Stam disclose that the LEDs of the headlamp are optically coupled to optical fibers. Thus, claims 46-48 are allowable over Stam for at least these reasons.

Furthermore, new claim 48 recites that the emitters face a common direction and that the optical fibers are divided into at least three groups, a forward facing group, a right facing group and a left facing group and wherein the selected illumination pattern is steerable by triggering the output of light through the different groups of optical fibers. Stam discloses steering the headlamp without optical fibers, but fails to disclose steering light by triggering output of light through different optical fibers such that claim 48 is allowable for at least these additional reasons.

103 Rejections

Various combinations of references including those discussed above have been used to reject the various groupings of claims. However, as stated above, claim 1 includes recitations not disclosed by any of the cited references, singly or in combination, such that claim 1 and its dependents are allowable over the cited references. Claim 38 includes allowable subject matter such that claim 38 and its dependents are allowable over the cited references. Claim 46 was not rejected under section 103.

Conclusion

Applicants assert that the application including all claims 1-19, 21-44, and 46-48 is now in condition for allowance. Applicants request reconsideration in view of the amendments and remarks above and further request that a Notice of Allowability be provided. Should the Examiner have any questions, please contact the undersigned.

No fees are believed due as the final day of the shortened statutory period for response fell on a Saturday.

Respectfully submitted,

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/Jeramie J. Keys/
Jeramie J. Keys
Reg. No. 42,724

Withers & Keys, LLC
P.O. Box 71355
Marietta, Ga 30007-1355
(404) 849.2093